

60 ton capacity ZCT600V532



ZOOMLION

40
PRODUCTS



VISION CREATES FUTURE



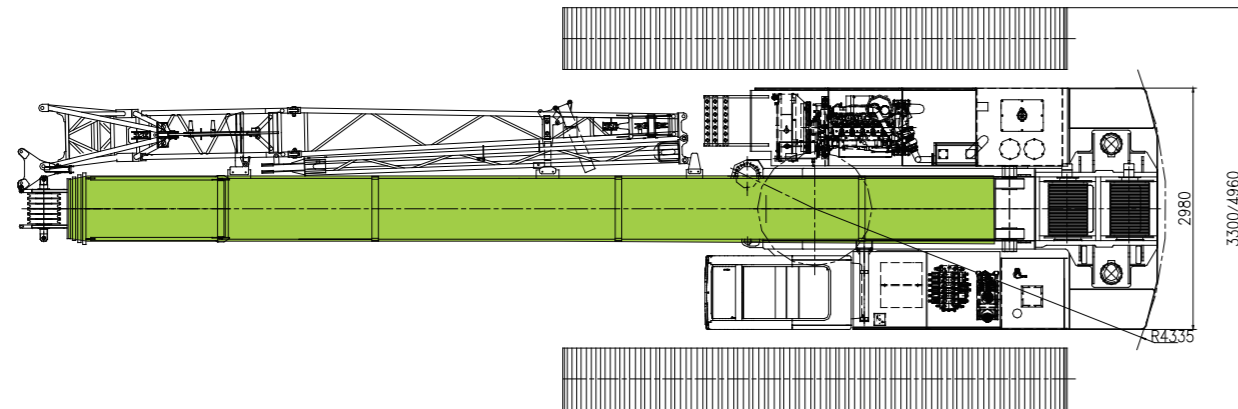
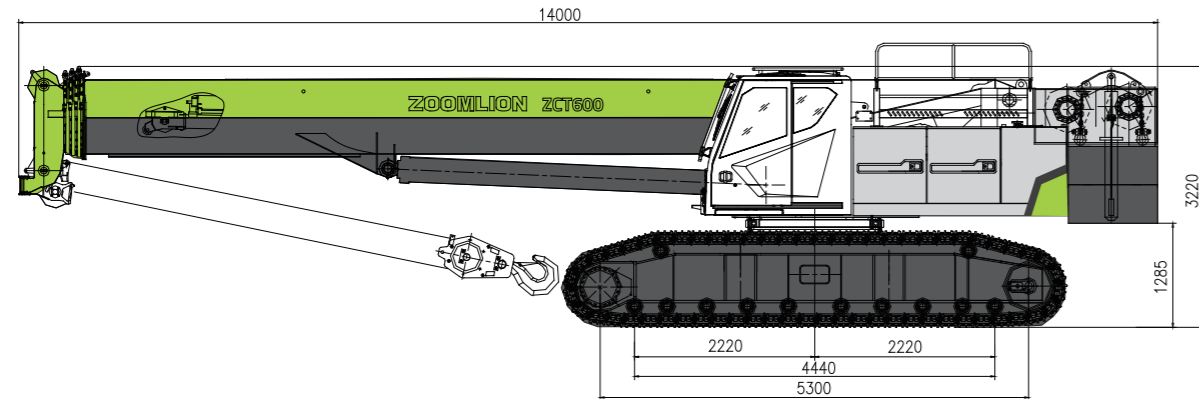
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DIMENSIONS

Basic machine with undercarriage



TECHNICAL FEATURE

1.Mature design

· The strongest lifting performance, high reliability, cost advantage, intelligent control.

2.Strong lifting capacity

· The industry's longest five 46m U shape boom; The maximum lifting torque is 2205knm, and the maximum lifting load of full boom is 11T, which is the highest in the industry; The comprehensive lifting performance is higher than that of domestic competitive products.

3.High operation efficiency

· Convenient transportation, few assembly parts, fast self-assembly of 20t movable counterweight, high efficiency on site.

4.High operation efficiency

· Standard vertical outrigger, powerful driving system, 45% climbing gradeability, suitable for complex hoisting environment, soft, uneven, narrow space and other occasions.



TECHNICAL DESCRIPTION



Engine

Engine type----WEICHAH WP6G210E330
 Rated power----154 kW/2200rpm
 Maximum output torque----860 N·m/1500rpm
 Fuel tank-----570L



Hydraulic system

The series hydraulic system with hydraulic pilot proportional control is adopted, and the planetary reducer is driven by high-speed hydraulic motor to realize the action of the actuator. The system has the characteristics of high efficiency, energy saving, stable compound action, no impact, safety and reliability.
 Cooler: a radiator driven by a high-power hydraulic motor, 40kW
 Hydraulic oil tank capacity-----770L



Hoisting winch

There are main and auxiliary winch mechanisms. The hydraulic motor drives the grooved drum through the planetary gear reducer to realize the lifting and landing of the hook. A brake is installed between the motor and the reducer. The main winch and auxiliary winch can be controlled independently. Built in planetary reducer, compact structure, light weight, high reliability. The anti torsion high-strength hoisting wire rope is adopted, and the specifications of the wire rope show as follows:
 Diameter: ϕ 17.0mm
 Strength grade: 1870N/ mm²
 Length: 230m for main hoisting rope and 140m for auxiliary hoisting rope.

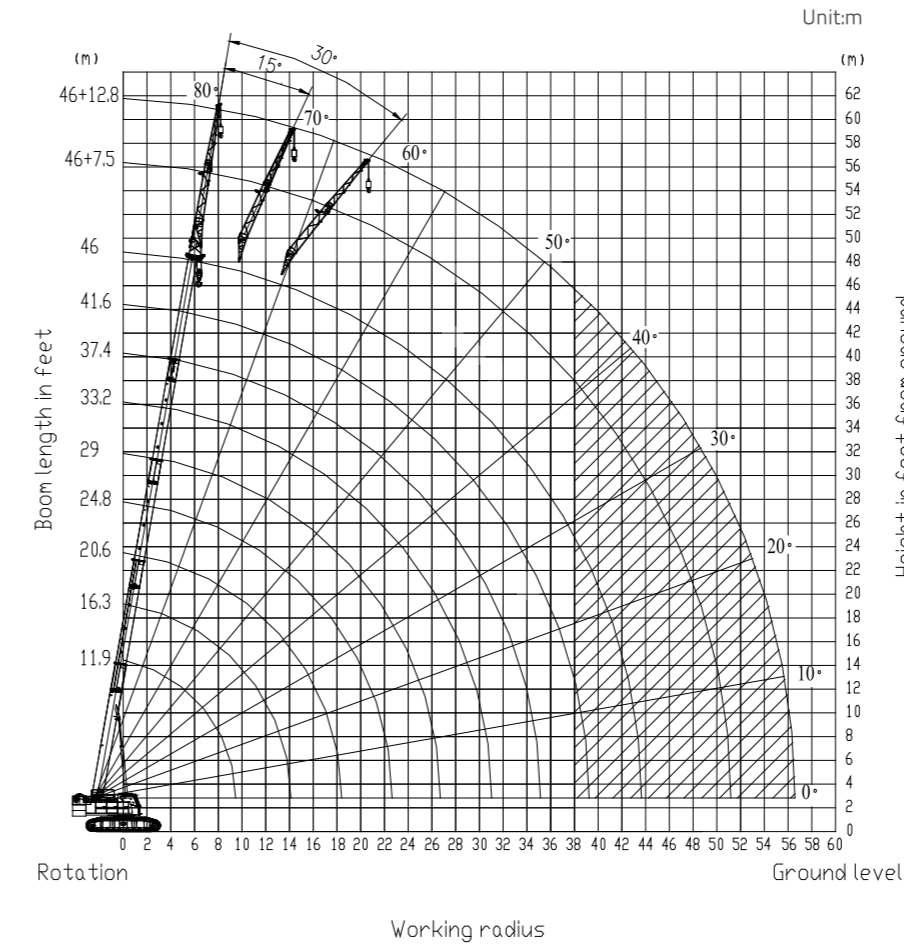


Swing

Driven by planetary gear reducer, the axial quantitative plunger hydraulic motor can realize 360 ° full rotation of the turntable. The free sliding function can effectively reduce the lateral tension on the boom.
 Slewing bearing
 Single-row-roller and four-point-contact slewing bearing, internal gearing
 Slewing speed
 The maximum slewing speed is 2 rpm.

LIFTING PERFORMANCE

Lifting height curve



Main Boom Lifting Performance Table

Unit: kg

Working Radius (m)	Main boom (m)									
	1 cylinder fully extended, crawler fully extended, 360 ° operation, 20t counterweight, 0°									
	11.9	16.3	20.6	24.8	29	33.2	37.4	41.6	46	
3.0	60000	46000								
3.5	54000	46000	38000							
4.0	52000	46000	35000	29000						
4.5	50000	46000	33000	28000	27000					
5.0	44000	43000	31000	27500	27000					
5.5	38000	37000	28000	25500	27000					
6.0	36000	35000	27000	24500	27000	22000				
7.0	27000	26500	24500	22000	24500	20000	19000			
8.0	21000	21000	22000	19500	21500	18000	16800	15000		
9.0		17000	18000	17500	19200	16500	14500	14000	11000	
10.0		14500	14500	15500	15600	15000	13600	12800	10800	
11.0		11200	11500	11800	12500	13000	12400	11200	10000	
12.0		9800	10000	11500	11500	12500	11500	10400	9600	
14.0			7800	8400	9000	9600	9800	9000	8600	
16.0			5500	6500	7000	7500	7800	8000	7600	
18.0				5000	5200	6000	6200	6500	6800	
20.0				3800	4100	4800	5000	5000	5600	
22.0					3100	3700	4000	4200	4500	
24.0						3000	3200	3200	3700	
26.0							2400	2600	3000	
28.0								2100	2200	2500
30.0								1600	1800	2100
32.0									1400	1800
34.0									1100	1400
36.0										1100
38.0										900
40.0										
I	0	4.4	8.7	8.7	8.7	8.7	8.7	8.7	8.7	
II	0	0	0	4.2	8.4	12.6	16.8	21	25.4	
Reeving	12	10	8	8	6	6	6	4	4	
Hook									60t	



LIFTING PERFORMANCE

Unit: kg

Working Radius (m)	Main boom(m)							
	I cylinder extended to 50%, crawler fully extended, 360 ° operation, 20t counterweight, 0°							
	11.9	16.3	20.5	24.7	28.9	33.1	37.3	41.7
3.0	60000	46000						
3.5	54000	46000	29000					
4.0	52000	46000	29000	27000				
4.5	50000	46000	29000	27000	25000			
5.0	44000	43000	29000	27000	25000			
5.5	38000	37000	29000	27000	25000	20000		
6.0	36000	35000	29000	27000	25000	19500		
7.0	27000	26500	29000	27000	25000	18000	16000	
8.0	21000	21000	23000	23000	24000	16000	15000	11500
9.0		17000	18800	18500	20000	14500	14000	11000
10.0		14500	15500	16000	16500	13500	13000	10500
11.0		11200	13000	14000	14200	12500	12000	10000
12.0		9800	11000	11500	12000	11600	11200	9500
14.0			8500	9000	9200	9500	10000	8800
16.0				7200	7500	7800	8000	7800
18.0				5500	6000	6400	6800	7000
20.0					4800	5200	5500	5600
22.0					4000	4200	4500	4800
24.0						3000	3600	3800
26.0						2600	3000	3200
28.0							2400	2500
30.0							2000	2200
32.0								1800
34.0								1500
36.0								
38.0								
40.0								
I	0	4.4	4.4	4.4	4.4	4.4	4.4	4.4
II	0	0	4.2	8.4	12.6	16.8	21	25.4
Reeving	12	10	8	8	6	6	4	4
Hook	60t							

Unit: kg

Working Radius (m)	Main boom(m)						
	I cylinder extended to 0%, crawler fully extended, 360 ° operation, 20t counterweight, 0°						
	11.9	16.1	20.3	24.5	28.7	32.9	37.3
3.0	60000	29000					
3.5	54000	29000	27000				
4.0	52000	29000	27000	25000			
4.5	50000	29000	27000	25000	20000		
5.0	44000	29000	27000	25000	18500		
5.5	38000	29000	27000	25000	17800	16000	
6.0	36000	29000	27000	24000	16500	15000	
7.0	27000	24000	25000	22000	14500	14500	12000
8.0	21000	20000	21000	20000	13500	13000	12000
9.0		17500	18500	18000	12400	12000	11000
10.0		15000	16000	16000	11800	11000	10000
11.0		12000	13000	14000	11000	10200	9200
12.0			11000	12000	10000	9400	8500
14.0			9000	9800	9000	8400	7600
16.0				8000	7800	7600	6800
18.0				6400	6500	6800	6200
20.0					5200	5500	5600
22.0					4300	4600	4800
24.0						4000	4200
26.0						3200	3500
28.0							3000
30.0							2400
32.0							
34.0							
36.0							
38.0							
40.0							
I	0	0	0	0	0	0	0
II	0	4.2	8.4	12.6	16.8	21	25.4
Reeving	12	10	8	8	6	6	4
Hook	60t						

LIFTING PERFORMANCE

Main Boom + Jib Lifting Performance Table

Unit: kg

Boom angle (°)	Main boom (m) + Jib (m)					
	Side, rear operation, 20t counterweight					
	46+7.5			46+12.8		
	0°	15°	30°	0°	15°	30°
80	5000	3300	2500	3000	2000	1500
78	5000	3300	2500	3000	2000	1450
76	4800	3200	2500	2900	1900	1400
74	4500	3100	2500	2700	1800	1350
72	4200	3000	2500	2500	1700	1300
70	3900	2800	2400	2300	1650	1250
68	3600	2700	2300	2100	1600	1250
66	3400	2600	2200	2000	1550	1200
64	3100	2500	2100	1900	1500	1200
62	2700	2400	2000	1800	1450	1150
60	2300	2100	1850	1700	1400	1100
58	2100	1900	1600	1600	1350	1050
56	1800	1600	1500	1350	1250	1000
54	1600	1300	1200	1200	1100	900
52	1300	1100	1000	1000	900	850
50	1100	1000	900	850	800	750
48	900	800	700	700	650	600
46	750	700	600	600		
44	600	550				
42						
Reeving	1					
Hook	5t					

Rated lifting capacity table for on load driving

Unit: kg

Working Radius (m)	Main boom(m)				
	I cylinder fully extended, 20t counterweight, front on load driving (<0.4m/s), 0-1°				
	11.9	16.3	20.6	24.8	29
3.0	42000	32200			
3.5	37800	32200	26600		
4.0	36400	32200	24500	17400	
4.5	35000	32200	23100	16800	16200
5.0	30800	30100	21700	16500	16200
5.5	26600	25900	19600	15300	16200
6.0	25200	24500	18900	14700	16200
7.0	18900	18600	17200	13200	14700
8.0	14700	14700	15400	11700	12900
9.0		11900	12600	10500	11520
10.0		10200	10200	9300	9360
11.0		7800	8100	7100	7500
12.0		6900	7000	6900	6900
14.0			5500	5000	5400
16.0			3900	3900	4200
18.0				3000	3100
20.0				2300	2500
22.0					1900
24.0					
I	0	4.4	8.7	8.7	8.7
II	0	0	0	4.2	8.4
Reeving	12	10	8	8	6
Hook	60t				



LIFTING PERFORMANCE

Working Radius (m)	Main boom(m)				
	I cylinder extended to 50%, 20t counterweight, front, on load driving (<0.4m/s), 0-1°				
	11.9	16.3	20.5	24.7	28.9
3.0	42000	32200			
3.5	37800	32200	20300		
4.0	36400	32200	20300	16200	
4.5	35000	32200	20300	16200	15000
5.0	30800	30100	20300	16200	15000
5.5	26600	25900	20300	16200	15000
6.0	25200	24500	20300	16200	15000
7.0	18900	18600	20300	16200	15000
8.0	14700	14700	16100	13800	14400
9.0		11900	13200	11100	12000
10.0		10200	10900	9600	9900
11.0		7800	9100	8400	8500
12.0		6900	7700	6900	7200
14.0			6000	5400	5500
16.0				4300	4500
18.0				3300	3600
20.0					2900
22.0					2400
24.0					
I	0	4.4	4.4	4.4	4.4
II	0	0	4.2	8.4	12.6
Reeving	12	10	8	8	6
Hook	60t				

Working Radius (m)	Main boom(m)				
	I cylinder extended to 0%, 20t counterweight, front, on load driving (<0.4m/s), 0-1°				
	11.9	16.1	20.3	24.5	28.7
3.0	42000	20300			
3.5	37800	20300	18900		
4.0	36400	20300	18900	15000	
4.5	35000	20300	18900	15000	12000
5.0	30800	20300	18900	15000	11100
5.5	26600	20300	18900	15000	10700
6.0	25200	20300	18900	14400	9900
7.0	18900	16800	17500	13200	8700
8.0	14700	14000	14700	12000	8100
9.0		12300	13000	10800	7400
10.0		10500	11200	9600	7100
11.0		8400	9100	8400	6600
12.0			7700	7200	6000
14.0			6300	5900	5400
16.0				4800	4700
18.0				3800	3900
20.0					3100
22.0					2600
24.0					
I	0	0	0	0	0
II	0	4.2	8.4	12.6	16.8
Reeving	12	10	8	8	6
Hook	60t				

MIAN TECHNICAL PARAMETERS

Item	Unit	Value	Remarks
Maximum lifting capacity	t	60	
Maximum lifting moment of basic boom	t×m	225	
Maximum lifting moment of the boom (full extended)	t×m	122	
Main boom length	m	11.9-46	
Jib length	m	7.5-12.8	
Length of Main boom + jib	m	58.8	
Main Boom angle	°	-2-80	
Jib mounting angle	°	0, 15, 30	
Maximum speed of single rope (main winch)	m/min	135	No load, at the fourth layer
Maximum speed of single rope (auxiliary winch)	m/min	135	No load, at the fourth layer
Boom derricking time	s	50	
Boom extension time	s	120	
Slewing speed	rpm	0-2	
Walking speed	km/h	2.7 (No load) / 1.5 (Full load)	
Gradeability		45	
Weight	t	62.5	Basic boom with main hook
Counterweight	t	20	
Dimension (L × W × H)	mm	14000×3300 (4960) ×3220	
Engine	Model	WP6G210E330	WEICHAI
	Rated power / speed	kW/rpm	154/2200
	Maximum output torque / speed	Nm/rpm	860/1500
	Emission	/	Non road China standard III

Note:

1. The single rope speed, slewing speed and traveling speed of the winch vary with the load.

